

# Oracle WebLogic Server 14c : JMS Administration

**Prix :** 2 850 € HT

**Durée :** 4 jours

**Code de Référence :** D84363

Catalogue Application Development

Cette formation Oracle SOA Suite 12c : Build Composite Applications vous apprend à concevoir et développer des applications composites SOA pour l'intégration d'applications avec des services. Vous utiliserez une approche de mise en œuvre SOA (Service-Oriented Architecture).

## Objectifs de la formation

A l'issue de cette formation Oracle, vous serez capable de :

- Implement Business Rule component with IF-THEN rules and decision tables
- Test, debug, and troubleshoot a SOA composite application
- Initiate SOA composite applications using the Events Delivery Network
- Apply security policies to service endpoints to secure interactions
- Implement Human workflow with Human Task components
- Describe SOA concepts and related technology
- Orchestrate business process flows by using BPEL
- Work with Mediator components with routing rules, filters, and transformations
- Create a SOA composite application using JDeveloper

## Public

Cette formation Oracle SOA Suite 12c s'adresse aux développeurs d'applications, consultants technique et analystes.

## Prérequis

Knowledge of XML, XML Schema, XSL Transformations and XPath, knowledge of web service standards, including REST, SOAP and WSDL.

Compréhension de l'anglais et du vocabulaire anglais spécifique IT.

Vous souhaitez faire vérifier vos prérequis ? Contactez-nous pour l'organisation d'un entretien téléphonique avec un de nos consultants formateurs.

## Programme de la formation

## **Introduction to Service Oriented Architecture**

- Describing Service-Oriented Architecture (SOA)
- Explaining Service Component Architecture
- Reviewing of Services and Key Standards
- Explaining the Oracle SOA Suite 12c Architecture and Components
- Explaining Business Events and the Event Delivery Network
- Installing the Oracle SOA Suite 12c Quickstart

## **Getting Started with Composite Applications**

- Describing Basic Synchronous and Asynchronous Interaction Patterns
- Discussing XSD and Web Services Description Language (WSDL)
- Creating a Mediator Component
- Defining a Routing Service
- Creating XSL and XQuery Transformations with the XSLT Mapper
- Introducing Working with Adapters
- Creating a File Adapter Service Reference
- Examining the composite.xml Source

## **Managing and Monitoring a Composite Application**

- Deploying a Composite Application
- Versioning Applications
- Discussing Application state
- Using Configuration Plans
- Managing the Life Cycle of a Composite Application
- Testing a Composite Application
- Managing SOA Applications with JDeveloper
- Testing a Composite Application in Enterprise Manager

## **Working With Data**

- Discussing Data Standards
- Using Attributes
- Introducing XSL Transformations
- Using XPath Functions
- Using the Mapper in JDeveloper
- Testing Transformations
- Working with Native Format Data

## **Using the JMS and JDBC Adapters**

- Introducing Binding Components and JCA Adapters
- Monitoring Adapters
- Discussing JMS Messaging
- Discussing Adapters and the WebLogic Application Server
- Introducing the Oracle JMS Adapter
- Configuring JMS Resources with WebLogic Administration Console
- Configuring the JDBC Adapter
- Discussing Transactionality

## **Introduction to BPEL**

- Defining Business Processes and BPEL
- Introducing Parts of a BPEL Process
- Discussing Variables in a BPEL Process
- Using the Sequence and Scope Activities
- Using the BPEL Design Editor
- Testing a BPEL Process in Enterprise Manager

### **More BPEL Activities**

- Conditional Branching with the If Activity
- Processing with the Flow Activity
- Parallel and Sequential Looping with the Foreach Activity
- Suspending a Process with the Wait Activity
- Waiting for a Message with the Pick Activity
- Looping with the While Activity
- Indexing XML Arrays Dynamically
- Examining Structured and Extension BPEL 2.0 Activities

### **Handling Faults in Composite Applications**

- Introducing Faults and Fault Handling Options
- Managing Faults in Synchronous and Asynchronous Mediators
- Returning Faults from Synchronous and Asynchronous BPEL Processes
- Throwing Faults in BPEL Processes
- Introducing Compensation and Compensation Handlers
- Introducing the Fault Management Framework
- Configuring Fault Policies
- Recovering Faults with Enterprise Manager Fusion Middleware Control

### **Introducing Human Tasks**

- Introducing Human Tasks
- Creating and Configuring a Human Task in a Composite Application
- Adding a Human Task to a BPEL Process
- Generating and Deploying Task Display Forms
- Using the Worklist Application to View and Act on Task Information
- Introducing the Oracle User Messaging Service
- Configuring UMS Notification Properties
- Sending Notifications to User's Preferred Channel

### **Sharing Functionality**

- Using the Design-time Meta Data Services (MDS) Repository to share files
- Introducing Templates
- Creating and Using Project, Service Component, and Scope Activity Templates
- Introducing BPEL Subprocesses
- Creating and Using Standalone Subprocesses
- Creating and Using Inline Subprocesses
- Describing the Differences Between Templates and Subprocesses

### **Using the REST Adapter**

- Introducing REST Services
- Comparing REST and SOAP Web Services

- Creating and Configuring a REST Adapter

## **Introducing Business Rules**

- Introducing the Business Rule Component
- Describing the Oracle Business Rules Architecture
- Creating Rules and Decision Tables with the JDeveloper Rule Editor
- Examining Business Rule Component Files
- Describing the Role of the Rules SDK
- Editing Business Rules at Runtime

## **Designing and Managing Business Events**

- Describing the Event Delivery Network
- Creating a Business Event
- Publishing an Event
- Subscribing to an Event
- Managing Events in Oracle Enterprise Manager

## **Testing SOA Composite Applications**

- Introducing the Composite Test Framework
- Defining Emulations and Assertions
- Discussing Test Suites and Test Cases
- Testing Initiation of Inbound Messages
- Emulating Outbound, Fault, and Callback Messages
- Running Test Cases
- Examining Results of a Test Run
- Using the SOA Debugger to Debug Composite Applications

## **Securing Services and Composite Applications**

- Explaining Security for Services
- Describing the Fusion Middleware Security Architecture
- Attaching Security Policies at Design Time in JDeveloper
- Attaching Security Policies Post-Deployment in Enterprise Manager

## **Méthodes pédagogiques**

Alternance d'apports théoriques et d'exercices avec un vaste choix d'exercices pratiques et de scénarios d'atelier permettent de mettre en œuvre les connaissances acquises.

La dernière version du support en anglais est accessible en ligne. Vous aurez à votre disposition un accès contenant tous les matériels de cours de votre formation, ainsi qu'un accès à 5 h de visionnage d'une autre formation de votre choix dans la même thématique. L'ensemble sera disponible pendant 90 jours.

## **Méthodes d'évaluation des acquis**

Afin d'évaluer l'acquisition de vos connaissances et compétences, il vous sera envoyé un formulaire d'auto-évaluation, qui sera à compléter en amont et à l'issue de la formation.

Un certificat de réalisation de fin de formation est remis au stagiaire lui permettant de faire valoir le suivi de la formation.

## Les plus de cette formation

By taking this course, you'll learn how to integrate your organization's applications into agile, reusable, service-based connectivity to reduce risk and respond faster to business requirements. Become more effective at managing and monitoring a composite application to support your organization's integration roadmap strategy and lower its total cost of ownership.